

Greater Milwaukee Area Rain Garden Tour

A showcase of rain gardens and other clean water practices
in the Milwaukee area, brought to you by
UW-Extension

Milwaukee County Master Gardeners, and
the Milwaukee River Basin Partnership

FREE AND OPEN TO THE PUBLIC



Sunday, July 16, 2006

Open House: 11 am to 4 pm at the Shorewood Public Library
3920 North Murray Avenue, Shorewood, Wisconsin

Rain Garden Tour: 11 am to 4 pm

Various sites as listed inside

Green Roof Tours at Highland Gardens: 1 pm and 2 pm

Open House: 11 am to 4 pm

Rain Garden Tour: 11 am to 4 pm

Schedule:

11 am to 4 pm: **SHOREWOOD PUBLIC LIBRARY OPEN HOUSE** *Exhibitors, Presentations*

- 11 am: Welcome, Exhibitors, Refreshments, & Sponsor Presentation
- 11:30 am: "How to Build a Rain Garden" presentation
- 12:30 pm: Highlights of a Rain Garden, David Ciepluch
- 1:30 pm: Highlights of a Rain Garden, Kathleen Awe
- 2:30 pm: "How to Build a Rain Garden" presentation
- 3:30 pm: Highlights of a Rain Garden, Richard Marklin

11am to 4 pm: **"AT YOUR LEISURE" RAIN GARDEN TOUR** *Drive from garden to garden and see the various garden styles and meet the homeowners! See list of sites and map on pages 8 and 9.*

- 1 pm: Green Roof Tour, Host Site #13
- 2 pm: Green Roof Tour, Host Site #13
- 4 pm: Open House and Tour conclude.
THANK YOU for coming



Dale Dean, Applied Ecological Services photo



Tim Burck photo



Carol & Dan Chew photo

Welcome!

Welcome to Milwaukee's second public rain garden tour! UW-Extension, Milwaukee County Master Gardeners, and the Milwaukee River Basin Partnership are excited to bring you this free public event. We invite you to visit established rain gardens for viewing in the Greater Milwaukee area. The self-guided format allow you to set your own pace as you meet the individuals and organizations who are using this beautiful and functional landscaping technique to protect water quality in the Greater Milwaukee Area. All of the "Hosts" on the tour are volunteers who are glad to share their experiences with you. We thank them for their time, energy, and commitment to protecting the area's lakes, rivers and wetlands!

Tips for this tour

This tour is self-guided. Travel at your own pace to as many or as few of the sites as you wish in the time allotted. There is no "correct" order to see the sites. You may visit the Open House at the Shorewood Public Library at any time during your tour to take advantage of the many presentations and exhibits. Our kick-off is at 11 a.m. at the Shorewood Public Library!

Where to park

Suggested parking locations are listed below the host site description. You may need to find alternate parking at a site during heavy visitation times.

Think safety

Nothing is more important than your safety at a site. Please use caution when crossing streets, watch for other tour members when traveling to and from sites, and please drive slowly near sites.

We would like to thank our sponsors for making this public event possible!

Our "500-Year Flood" Sponsor (\$2,000)

We Energies, through the Wisconsin Energy Corporation Foundation



through the Wisconsin Energy Corporation Foundation

Our "Torrential Downpour" Sponsors (\$500)



Our "Thunderstorm" Sponsor (\$100)

Miller Brewing Company

SouthEast Wisconsin Master Gardeners

Our "Shower" Sponsor (\$50)

Dennis R. Buettner

Symbiont

Alterra Coffee Roasters



What is a rain garden?

Rain gardens are landscaped areas planted with wildflowers, sedges, grasses and other native plants that soak up rain water, mainly from building roofs or downspouts. The rain garden collects water during a storm and allows it to slowly filter into the ground rather than running off to a storm drain.

Why are rain gardens important?

RAIN GARDENS REDUCE STORMWATER RUNOFF.

As cities and suburbs grow and replace forests and fields with paved surfaces, increased stormwater runoff becomes a significant problem. Stormwater that does not soak into the ground collects pollutants from streets, parking lots, and buildings, and flows directly into area waterways via storm drains. Runoff pollution is now recognized as the biggest threat to the health of Wisconsin's lakes, rivers, and streams. It has also been a significant problem in the Milwaukee River Basin.

How do rain gardens help?

When properly installed, rain gardens and other water quality practices help to:

- ☼ Recharge groundwater supplies by increasing infiltration
- ☼ Protect communities from flooding
- ☼ Trap pollutants, such as lawn fertilizers, pesticides, oil and other car pollutants, which would otherwise flow directly to local waterways
- ☼ Beautify your community
- ☼ Provide habitat for birds, butterflies, and other wildlife



Host Sites:

Bayside Private Gardens on the Tour:

1 Lorrie Otto

9701 North Lake Dr., Bayside

This one acre rain garden was gradually established since 1970. It was designed by the homeowner and her family. In recent years, neighborhood children and botany students have assisted in the plantings. Plants were obtained from Wild Ones plant exchanges, sales and rescues, and many native plant nurseries. This site also features turfstone and rain barrels.

Parking: along east side of Lake Dr.



Lorrie Otto photo

2 Carol & Dan Chew

8920 North Lake Dr., Bayside

This 150+ sq-ft rain garden was planted in August 2003. It was designed by Mandy Ploch, A.A.S to absorb stormwater from the Chew's roof and the neighbor's sump pump overflow. It eliminated the need for running above-ground hoses to the ditch lining Lake Dr. Plants were donated and purchased from several garden centers. The garden displays 66 native plants.

Parking: both sides of Lake Dr.



Carol & Dan Chew photo

Village of Shorewood Rain Gardens

In order to relieve some of the stress on the Village of Shorewood's combined sewer system, residents were asked to have 100 sq-ft rain gardens installed in conjunction with downspout disconnections. All gardens were designed and installed by LandWorks, Inc. Residents were given three garden styles to choose from: Naturalistic, Formal and Sedge & Grass Border. Two groups of plants for each style type were selected for either sun or part sun- part shade conditions. The native plants selected were chosen first for their ability to thrive in a free draining, sandy soil mixture, withstanding both drought and wet conditions. Each garden includes about 12 different native species. The Atwater School and Public Library rain gardens served as examples for the residents. This year's tour highlights 3 residential rain gardens at sites 3, 4 & 5.

Private Shorewood Gardens on the Tour:

3 John and Jean Toutenhoofd

4487 N. Frederick Ave., Shorewood

Parking: streets

4 M. Caren Connolly & Louis Wasserman

1827 E. Marion St., Shorewood

Parking: streets

5 Louise Quigley

2201 E. Jarvis St., Shorewood

Parking: streets

Public Shorewood Gardens on the Tour:

6 Atwater Elementary School

2100 East Capital Dr., Shorewood

Kimberly Forbeck

This rain garden replaced an existing garden that was maintained by a parent group. It is located on the east side of the smaller Kindergarten building on the corner of Maryland Avenue and Capitol Drive, facing Maryland Avenue. About half of the roof surface drains directly into the garden. The space was created for student interaction and learning. The plant species were selected to thrive in part sun to part shade conditions, showcasing some plants not typically seen in many rain gardens like wild geranium, wild columbine and woodland phlox. This 750 sq-ft garden has served as the model for a much larger learning area/rain garden proposed for Trowbridge Elementary school in the Bayview area.

Parking: School Parking Lot



Land Works Inc. photo

7 Shorewood Public Library (Site of the Open House)

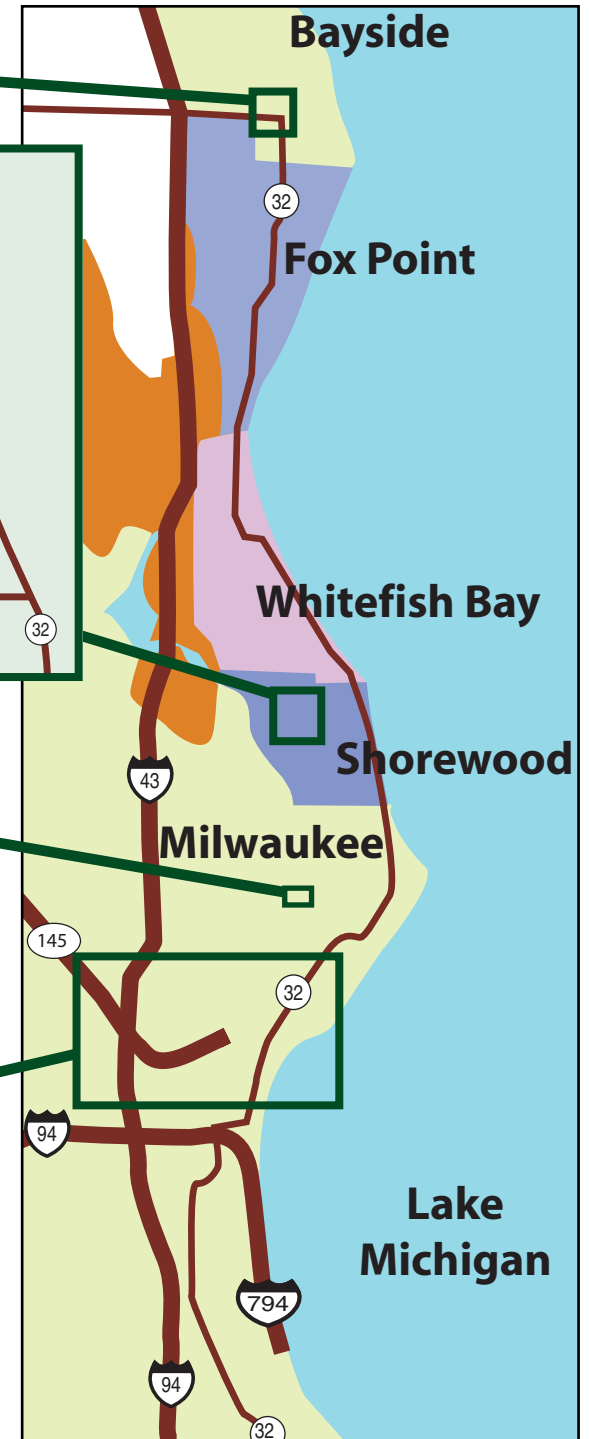
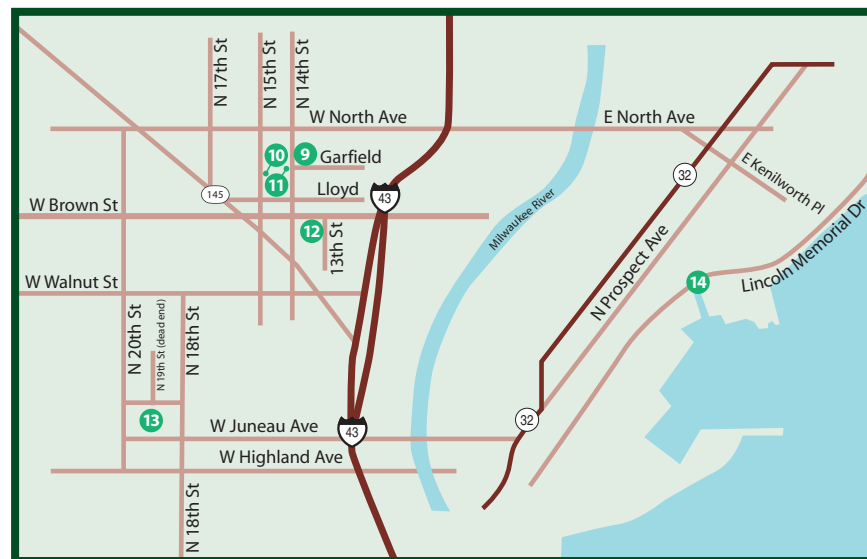
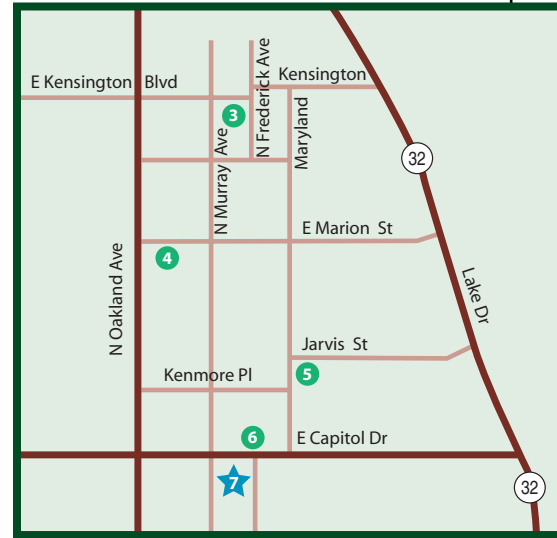
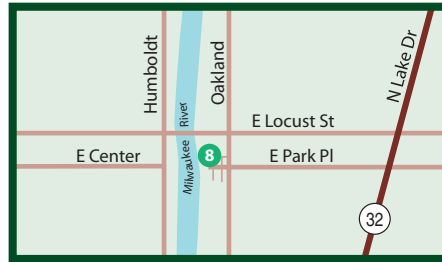
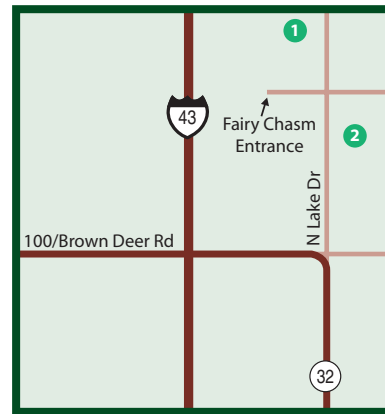
3920 North Murray Ave., Shorewood

This 800 S.F. site had been problematic for the Village because of the large amount of runoff that comes from the adjacent parking lot, walks and lawn. Most of the plants used in this garden were selected for their low to medium stature and tidy appearance. The layout is relatively

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Greater Milwaukee Area Rain Garden Tour Map

- 1 Lorrie Otto**
9701 North Lake Dr., Bayside
- 2 Carol & Dan Chew**
8920 North Lake Dr., Bayside
- 3 John and Jean Toutenhoofd**
4487 N. Frederick Ave., Shorewood
- 4 M. Caren Connolly & Louis Wasserman**
1827 E. Marion St., Shorewood
- 5 Louise Quigley**
2201 E. Jarvis St., Shorewood
- 6 Atwater Elementary School**
2100 East Capital Dr., Shorewood
- ★ Shorewood Public Library (Site of the Open House)**
3920 North Murray Ave., Shorewood
- 8 Urban Ecology Center**
1500 E Park Pl., Milwaukee
- 9 Louise Wilhite**
2202 N 14th St., Milwaukee
- 10 Annie Robinson**
2142 N. 15th St., Milwaukee
- 11 Adenike Ibitoye**
2149 N. 14th St., Milwaukee
- 12 Fran Dawson/Vivian Harris**
1301/1309 W Brown St., Milwaukee
- 13 Highland Gardens**
1818 W. Juneau Ave., Milwaukee
- 14 Alterra at the Lake**
1701 N Lincoln Memorial Dr., Milwaukee



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symmetrical and is bordered by a fox sedge "hedge." The goal was to create a rain garden for this full sun, often soggy site that would appear structured and formal in this highly visible area.

Parking: lot or on side streets

Central Milwaukee Gardens on the Tour:

8 Urban Ecology Center

1500 E Park Pl., Milwaukee

Site host: Sarah Rohe

There are two gardens at this site, planted in July and September of 2004, respectively. The smaller (160 sq-ft) garden is located on the west side of the bathroom in the middle of the playground at Riverside Park. The larger (1,050 sq-ft) garden is located on the entire north side of the building. The smaller "bathroom" garden was designed by Janine L. Grauvogl-Graham, P.E. from Stormtech. The UEC building garden was designed by the Kubabla Washatko Architects. Plants were purchased from Agrecol and installed by the designers, Urban Ecology Center staff and many volunteers.

Parking: limited parking along Park Place or Oakland Avenue

Walnut Way Conservation Corp

Gardens at sites 9, 10, 11 and 12 are part of a larger neighborhood enhancement and downspout disconnection project funded by MMSD. Walnut Way installed 12 rain gardens in 2005 and will be installing an additional 38 in 2006. This project is mobilizing one of the Milwaukee's oldest Central City neighborhoods in an environmental effort to divert stormwater from the combined sewer system and enhance the beauty and environmental stewardship of the community.

9 Louise Wilhite

2202 N 14th St., Milwaukee

This 140 sq-ft rain garden was planted in June of 2004 and a smaller one planted in 2005. The homeowner, a gardener and an MATC Landscape Design Instructor formed a team to design it. Planting was a group effort



Louise Wilhite photo

accomplished in 8 hours by Walnut Way neighbors, staff from the Milwaukee Community Service Corps and Growing Power, UWM students and faculty, and volunteers. Plants were donated and purchased from several garden centers.

Parking: along Garfield Street

10 Annie Robinson

2142 N. 15th St., Milwaukee

This 25 sq-ft rain garden was installed in 2005. It was designed in partnership with MATC landscaping department. Plants from Shady Acres were planted by Annie herself. The entire project took approximately 8 hours.

Parking: along 15th Street

11 Adenike Ibitoye

2149 N. 14th St., Milwaukee

Our host showcases 2 gardens, both approximately 60 sq-ft. The gardens, installed in 2005, were designed by Adenike, Connie Pukaite and Jim Walczk. Plants were obtained from Shady Acres and were planted by our host and a neighbor. The garden was created in approximately 4 hours.

Parking: along Garfield or 14th Streets

12 Fran Dawson/Vivian Harris

1301/1309 W Brown St., Milwaukee

This 600 sq-ft rain garden collects downspout water from both houses. It has a unique set-up of buried perforated pipe snaking through the garden to water the soil from underground. It was designed in 2004 by UWM and planted by Fran Dawson in 8 hours. Plants were obtained from neighbors and Stein's.

Parking: along Brown St.

13 Highland Gardens

1818 W. Juneau Ave., Milwaukee

Glen Radford, City of Milwaukee Housing Authority

This green public housing development providing 114 affordable, accessible apartments for the elderly and people with disabilities contains many 'green' features that will add to a higher standard of living for its residents and to the environment. The two rain gardens, 777 sq-ft each, were designed by Karl Kulas of Plant Associates, Inc. Plants, purchased locally, were planted in Fall 2004. Another green feature is the 20,032 sq-ft green roof that assists with on-site stormwater management. It is believed to be the largest vegetated roof on any residential development in the nation. The plants used for the green roof included a Sedum mix with six different varieties and cultivars. The roof was completed in 8 days. Meet at the rain garden for a green roof tour at 1 pm and 2 pm.

Parking: side streets or lot



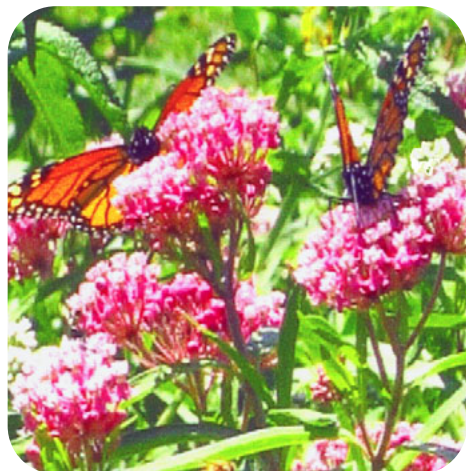
Glen Radford photo

14 Alterra at the Lake

1701 N Lincoln Memorial Dr., Milwaukee

There are two rain gardens and several rain barrels at this site designed by Janine Grauvogl-Graham, P.E. of Stormtech. The north side rain garden is 145 sq-ft and the east side rain garden is 140 sq-ft. Both were planted by La Rosa Landscaping and Janine in the fall of 2004. Plants were purchased from Argrecol. Labor was ~24 hours.

Parking: across the street in McKinley Marina



Dan Chew photo

RAIN GARDENS BY ROAD!

These gardens are open for viewing at any time, but are not official tour sites this year. For private home sites, please view from the road.

Tonawanda Elementary School

13605 Underwood River Pkwy, Elm Grove (back parking lot)

This 2,000 sq-ft rain garden was a joint effort between Tonawanda teachers, students and parents, and the nonprofit organization Friends of Milwaukee's Rivers, with design help from Nancy Aten. Students and parents planted the garden over ~40 hours between April and October, 2004. Plants were purchased

from the Prairie Future Seed Company. The Tonawanda Rain Garden was made possible by a grant from the National Park Foundation, through a donation from Tom's of Maine. Technical assistance was provided by the Rivers and Trails Program of the National Park Service.



photo courtesy of Friends of Milwaukee's Rivers

Miller Brewing Company

46th St. & State St., Milwaukee (NE Corner parking lot on State)

This 11,000 sq-ft rain garden was planted in September of 2004. It was designed by Triad Engineering with assistance from Buettner & Associates Landscape Architects. Stano Landscaping installed the plants over 2 months.



Willie Gorman, Triad Engineering photo

David Ciepluch

728 W. Abbott Avenue, Milwaukee

This site has three separate rain gardens: along-side the house (900 sq-ft), off the patio (20' x 20' x 20' sq-ft) and in back of the home (8,640 sq-ft). All gardens were designed by the homeowner and planted in 2000. Plants were purchased from Prairie Nursery, Plantland and Steins. Labor was ~100 hours and is still going!



David Ciepluch photo

Ready to install YOUR rain garden?

These materials will help you get started

"Rain Gardens: A How-To Manual for Homeowners"

Available free only during the tour at our open house!

The How-To manual was produced by UW-Extension and the Wisconsin Department of Natural Resources. For large orders (\$1 per manual), please contact Cooperative Extension Publications, 1-877-947-7827 or on the web at **cecommerce.uwex.edu**

The How-To manual can be viewed on the web at:
clean-water.uwex.edu/pubs



Want more information?

UW-Extension is offering a two-part design clinic on **"21st Century Landscaping"** on September 11, 18 and 25, 2006. Using case studies of participants' homes, this workshop will cover landscaping techniques for rain water management, edible landscaping, yard waste management, and minimum maintenance landscaping. Reserve your spot for this workshop using the form below! Cost for the two-part workshop: \$25/person, \$35/couple (sharing materials)

☐ **YES!!** Reserve my spot for the **"21st Century Landscaping"** Workshops on September 11, 18 and 25! With this form, I understand I am pre-registering for these workshops. My participation will be confirmed in August. (Payment will be required upon confirmation.)

Name(s) _____

Address _____

City, State, Zip _____

Telephone _____

Email _____

Please return this form to the Milwaukee County UWEX office, ATTN: Gail Epping Overholt, 932 South 60th Street, West Allis, WI 53214-3346

For educators...

Want help teaching others about the value of rain gardens?

The "Rain Garden Educator's Kit"

produced by UW-Extension and WI Department of Natural Resources, is for you!



In this kit, you will find:

- ⊗ A CD containing three Powerpoint presentations, a rain garden photo gallery, and case studies
- ⊗ The "Rain Gardens: A How-To Manual for Homeowners"
- ⊗ The "Wisconsin Native Plant Sources" guide
- ⊗ Web resources
- ⊗ And much more!!

To order your kit, fill out the form below and mail with your check payable to "UW-Extension" to:

Rain Garden Kit
Milwaukee County UWEX
932 South 60th Street
West Allis, WI 53214-3346

Name _____

Organization/agency/business _____

Address _____

City, State, Zip _____

Telephone _____

Email _____

I would like to order _____ number of rain garden kits at \$10 each.

Other Upcoming Rain Garden Events:

Boerner Botanical Gardens
9400 Boerner Dr., Hales Corners
Saturday, July 29
Rain Gardens
1 to 2:30 pm
\$12/\$10 members

Featured Instructor: Kathleen Awe, Master Gardener

By capturing rainwater in a rain garden, holding it, and then slowly releasing it into the soil, the rush of a large storm can be slowed and cleaned – quickly, neatly and naturally. Rain gardens are an inexpensive, simple to implement and environmentally sound solution to prevent polluted runoff from entering our groundwater, streams, lakes, and rivers!

Pre-registration is required.

Please call 414-525-5676 or email info@fbbg.org

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RIVER BASIN**



PARTNERSHIP



Carol & Dan Drew photo

**UW
Extension**

Graphic design by Allison Kirby, UW-Extension Environmental Resources Center